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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,821	01/21/2004	Hui Chin	PP/1-22826/A/CGC 2139	4075
324 7590 01/25/2007 CIBA SPECIALTY CHEMICALS CORPORATION PATENT DEPARTMENT 540 WHITE PLAINS RD P O BOX 2005 TARRYTOWN, NY 10591-9005			EXAMINER VIJAYAKUMAR, KALLAMBELLA M	
			ART UNIT	PAPER NUMBER
			1751	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/25/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/761,821

Applicant(s)

CHIN ET AL.

Examiner

Kallambella Vijayakumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Detailed Action***

- This application claims domestic priority under 35 USC 119(e) over provisional application No 60/442,636 filed 01/24/2003.
- Applicants election of Group-I, Claims 1-24 and Species of Polyethylene without traverse in reply filed 10/30/2006 is acknowledged. Claims 1-26 are currently pending with the application. Claims 25-26 withdrawn from further consideration.
- The examiner has considered the IDS filed 4/26/2004, 07/26/2004 and 10/29/2004.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 8 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation of “the polyolefins” in Line-2; “the polyesteremides” in Line-6, and “the alkylsulfonic acids,” “the alkyl diethanolamines” and “the alkyl diethanolamides” in Line-8, and there is insufficient antecedent basis for these limitations . It is suggested to delete the words “the” in the claim to overcome this rejection.

Claim 8 recites the limitation of “the ethylene oxide” in Line-1, and there is insufficient antecedent basis for this limitation. It is suggested to delete the word “the” in the claim to overcome this rejection.

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Claim 12 recites the limitation of “the alkali” in Line-2, and there is insufficient antecedent basis for this limitation. It is suggested to delete the word “the” in the claim to overcome this rejection.

Claim 13 recites the limitation of “the cation” in Line-2, and there is insufficient antecedent basis for this limitation. It is suggested to delete the word “the” in the claim to overcome this rejection

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 9-10, 12-13 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilti et al (US 5,965,206).

Hilti et al teaches a composition comprising a thermoplastic fiber (A) <Substrate> and an antistatic composition (B). The preferred thermoplastic (A) included polyethylene, polyester and

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polyamides. The antistatic (B) comprised of components : (b1)- a fibrous/fiber forming polyamide, (b2). A block copolymer of polyetheresteramide <PEEA>, and (b-3) a low molecular weight organic salt of alkali metal having C1-C4 acids such as methanesulfonic acid that meets the limitation of claims 1, 9-10, 12-13 and 20. (Abstract, Cl-5, Ln-11,30,38, 52-55 ; Cl-6, Ln 46-51 ; Cl-6, Ln 66-Cl 7,Ln 7 ; Cl-6, Ln 29-61 , Cl-13, Ln 20-31). With regard to claim-2, the prior art teaches a PEEA block copolymer of PEG with a molecular weight of 200-6000 and a polyamide segment having a molecular weight of 200-6000 daltons (Cl-7, Ln 1-7). All the limitations of the instant claims are met.

The reference is anticipatory.

2. Claims 3 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilti et al (US 5,965,206) and Ueda et al (EP 613919).

The disclosure on the antistatic composition as set forth in rejection-1 under 35 USC 102(b) is herein incorporated. The prior art further teaches the suitable polyether ester amides for the antistatic composition to be those taught by Uedo et al (Hilti: Cl-7, Ln 8-9). The incorporated prior art teaches the antistatic resin compositions containing PEEA formed from polyamide oligomers with carboxyl chain ends with an average molecular weight of 200-5,000 daltons having segments of C4-C20 dicarboxylic acids such as adipic and terephthalic acids (Ueda: Abstract, Pg-3, Ln 30-40). The bisphenol compounds forming PEEA included oxyalkylated bisphenol compounds with an average molecular weight of 300-3,000 and having 32-60 oxyethylene units (Pg-3, Ln-41 to Pg-4, Ln-16). With regard to claims 6-8, the examiner notes the product by process limitation in the claims, and asserts that the prior art PEEA made by

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condensing a polyamide oligomer with oxyalkylated bisphenol will be same or indistinguishable to that produced by the instant claimed product by process composition. All the limitations of the instant claims are met.

The reference is anticipatory.

3. Claims 1, 3, 6-9 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al (US 5,604,284).

Ueda et al teach an antistatic composition containing 60-97 wt% thermoplastic such as polyethylene, polypropylene or its copolymer, polyamide and polyester <substrate>, and 3-40 wt% of a polyetheresteramide (PEEA) containing a polyamide oligomer with carboxylic acid ends having a MW of 200-5000 and a bisphenol compound with oxyalkylene units having a MW of 300-3000 (Abstract). The composition further contained 0.05- 3 wt% surfactant such as alkyl sulfonate based on the amount of the PEEA and metal halide in the composition that meets components and their ratios in claims 1, 3, 9 and 20-24 (Cl-12, Ln-23-28, Cl-11, Ln 8-15). The prior art teaches PEEA composition containing polyamide oligomers comprising dicarboxylic acids such as adipic acid/terephthalic-acid and a bisphenol compound with oxyethylene groups (Cl-3, Ln 31-Cl-4, Ln 27). With regard to claims 6-8, the examiner notes the product by process limitation in the claim, and asserts that the prior art PEEA made by condensing a polyamide oligomer with oxyalkylated bisphenol will be same or indistinguishable to that produced by the instant claimed product by process composition. All the limitations of the instant claims are met.

The reference is anticipatory.

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4. Claims 1, 9-13, 15-18, 20 and 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwasa et al (US 2003/0072935).

Iwasa et al teaches a porous resin film composition containing a thermoplastic such as HDPE, PET, Polyamide <substrate>(Abstract, Para 0043), a hydrophilicizer of C8-C20 sulfoalkanecarboxylic acid ester salt such as a sodium salt of dodecanesulfonic acid (Para 0064-65,71), a hydrophilicizing aid such as lauryl diethanolamine (Para 0072) and hydrophilic resin such as polyether ester amide (Para 0081). The amount of hydrophilicizer was 0.01-50 parts by wt per 100 parts by weight of the thermoplastic (Para 0077). The antistatic property in the film will be inherent because prior art composition is identical to that by the applicants, and identical compositions possess identical properties. The wt% ratios of hydrophilicizer will meet the ratio limitations in claims 23-24. All the limitations of the instant claims are met.

The reference is anticipatory.

5. Claims 1-2, 9 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al (JP 05-148768).

Inoue et al teach a composition containing a synthetic fiber such as polyester <substrate> coated with a polyetheresteramide component produced from an amide of a dicarboxylic acid, a diamine and a polyether diol (Abstract; Para 0017). The dicarboxylic acids included terephthalic, isophthalic and adipic acids (Para-0008). A polyether diol included PEG with a MW 400-6,000. The coating composition further contained a surfactant such as polyoxyethylene laurylether sulfate triethanolamine salts and alkyl sulfonates <alkylsulfonic acid salts> (Para 0030) that meets the limitation of claims 1-2, 9 and 20. The coating solution contained polyether ester (A)

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and polyether esteramide (B) in the ratio of 50:50 and the coating on the substrate fiber ranged from 0.1-3 wt% (Para 0028-29). The prior art teaches the coating to contain 30 wt% wet pick up from the solution (example A-2a or A-2b) containing 1 wt% surfactant and 9 wt% of 50%PEEA in water translates to 1.32 wt% PEEA and 0.3 wt% surfactant on a dry basis that meets the limitation of component ratios in claims 21-24. All the limitations of the instant claims are met.

The reference is anticipatory.

6. Claims 1-3, 6-9, and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamiyama et al (US 6,162,545).

Kamiyama et teach an agent for providing an electrostatic coating property and improving the water resistance of a coating film comprising 100 weight parts of an aromatic ring-containing Polyetheresteramide (A) derived from a polyamide having carboxyl groups at both ends and having a number average molecular weight of 500 to 5,000 derived from acids such as adipic and terephthalic acids (Abstract, Cl-3, Ln 41-47, Ln 57-63) and an alkylene oxide adduct of bisphenols having a number average molecular weight of 1,600 to 3,000 (Cl-3, Ln 64 to Cl-4, Ln 17); and 5 to 100 weight parts of a vinyl copolymer (B) and a thermoplastic resin (C) (Cl-6, Ln 42-43, 56-57). The thermoplastic resin (C) further contained 300 parts by weight or less of other thermoplastic such as polyester, polyethylene and polypropylene per 100 parts by weight of styrene-based resin (Cl-7, Ln 1-30). The composition further contained alkali metal/alkaline-earth metal salts of organic acids (D) and alkylsulfonate surfactant in the amount of 0.1-5 parts by weight and this composition meets the composition in claims 1, 3, 9 and 20 (Cl-7, Ln 35-40; Cl-8, Ln 1-15).



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With regard to claim 2, the prior art teaches compositions containing PEEA made by condensation of polyamide oligomer containing carboxyl groups at both ends having an acid value of 110 and a PEG with an average molecular weight of 1,500 (Cl-12, Ex-2; Cl-13, Tbl-3, Ex-5).

With regard to claims 6-8, the examiner notes the product by process limitation in the claims and asserts that the prior art PEEA made by condensing a polyamide oligomer with oxyalkylated bisphenol will be same or indistinguishable to that produced by the instant claimed product by process composition.

Further, the ratio of component A and E in the composition meets the component ratios limitation in claims 21-24. All the limitations of the instant claims are met.

The reference is anticipatory.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilti et al (US 5,965,206) in view of Kamiyama et al (US 6,162,545).

The disclosure on the antistatic composition by Hilti et al as set forth in rejection-1 under 35 USC 102(b) is herein incorporated.

The prior art fails to teach the addition of a specific aliphatic polyetheresteramide (PEEA) per the claim, although it teaches a composition containing PEEA made from Polyamide oligomer and PEG.

In the analogous art, Kamiyama et teach antistatic compositions containing thermostatic polymers such as polyethylene and aliphatic PEEA made from polyamide oligomer and PEG (See Rejection-6 under 35 USC 102(b))

It would be obvious to a person of ordinary skilled in the art to substitute the PEEA in the antistatic composition of Hilti et al with specific aliphatic PEEA of Kamiyama et al as functional

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equivalent with reasonable expectation of success because combined prior art teaching is suggestive of the claimed composition.

2. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being obvious over Kamiyama et al (US 6,162,545).

The disclosure on the composition as set forth in rejection-6 under 35 USC 102(b) is here in incorporated. Kamiyama et al further teaches compositions containing PEEA made by condensation of polyamide oligomer containing carboxyl groups at both ends having an acid value of 110 and a PEG with an average molecular weight of 1,500 (Cl-12, Ex-2; Cl-13, Tbl-3, Ex-5). The examiner notes the product by process limitation in the claims, and asserts that the prior art PEEA made by condensing a polyamide oligomer with PEG will be similar to that produced by the instant claimed product by process composition, because the prior art components are similar to that claimed by the applicants.

3. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being obvious over Hilti et al (US 5,965,206) in view of Ueda et al (EP 613919).

The disclosure on the antistatic composition as set forth in rejection-1 under 35 USC 102(b) is herein incorporated. The prior art further teaches the suitable polyether ester amides for the composition to be those taught by Uedo et al (Hilti: Cl-7, Ln 8-9). The incorporated prior art teaches the antistatic resin compositions containing PEEA formed from polyamide oligomers with carboxyl chain ends with an average molecular weight of 200-5,000 daltons having segments of C4-C20 dicarboxylic acids such as adipic and terephthalic acids (Ueda: Abstract,

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Pg-3, Ln 30-40). The bisphenol compounds forming PEEA included oxyalkylated bisphenol compounds with an average molecular weight of 300-3,000 and having 32-60 oxyethylene units (Pg-3, Ln-41 to Pg-4, Ln-16). With regard to claims 6-8, the examiner notes the product by process limitation in the claims, and asserts that the prior art PEEA made by condensing an polyamide oligomer with oxyalkylated bisphenol will be similar to that produced by the instant claimed product by process composition, because the prior art components are similar to that claimed by the applicants.

4. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilti et al (US 5,965,206).

The disclosure on the antistatic composition by Hilti et al as set forth in rejection-1 under 35 USC 102(b) is herein incorporated.

The prior art fails to teach the addition of specific salts per the claims.

It would be obvious to a person of ordinary skilled in the art to substitute the salts of Hilti et al with long chain acid salts of alkali metals such as Na-lauryl sulfonate or Na-dodecyl sulfonate as functional equivalent with reasonable expectation of success, because they are the homologs of the Hilti's salts, and homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by -CH<sub>2</sub>- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. In re Wilder, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). With regard to claim-14, the surfactants are derived from natural oils/fatty acid sources and it would have been obvious to use such

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surfactants including the lauryl/dodecyl sulfonate derived from the natural sources with reasonable expectation success.

5. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al (US 5,965,206) in view of Kido et al (US 5,849,822).

The disclosure on the antistatic composition by Ueda et al as set forth in rejection-4 under 35 USC 102(b) is herein incorporated.

The prior art fails to teach the addition of specific alkyl sulfonate or diethanolamide surfactant per the claims.

In the analogous art, Kido et al teach antistatic compositions containing a thermoplastic such as Polyethylene terephthalate, polycarbonate or polyvinyl chloride, a polyether ester and 0.5-10 parts by weight of a surfactant such as sodium dodecylsulfonate per 100 parts by weight of thermoplastic resin. (Cl-6, Ln-1-5, 35-51; Cl-12, Ln-23-Cl-13, Ln 18) and further teaches the addition of alkylsulfonate ionic surfactants as antistatic agent (Cl-1, Ln 28-33).

It would be obvious to a person of ordinary skilled in the art to substitute the alkylsulfonate surfactant in the composition of Ueda et al with sodium docecylbenzenesulfonate of Kido et al as functional equivalents with reasonable expectation of success, because teachings are in the analogous art of thermoplastics and combined prior art teaching is suggestive of the claimed composition. With regard to claim-14, the surfactants are derived from natural oils/fatty acid sources and it would have been obvious to use such surfactants including the lauryl/dodecyl sulfonate derived from the natural sources with reasonable expectation success.

*Allowable Subject Matter*

- Claim 19 is objected to as a dependent on rejected base claim, and would be allowable if rewritten including all the limitations of the intervening claims

The prior art of record neither teaches nor fairly suggest an antistatic polymer composition comprising the specific components including lauryl bis(2-hydroxyethyl)amide.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on 8.30-6.00 Mon-Thu, 8.30-5.00 Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KMV  
January 20, 2007.



K.M. Vijayakumar

Patent Examiner